COMBINATIONAL APPROACH FOR DEVELOPING BUILDING BLOCKS OF DSP COMPILER

Abstract of the Disclosure

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An approach that uses a combinatorial approach by adopting natural language processing with the application of Finite State Morphology (FSM) to transform source code into an efficient assembly code. In one example embodiment, this is accomplished by modifying a source code, including multiple instructions,

10   using Lexical Functional Grammar Analysis (LFGA) operation on each instruction as a function of specific Digital Signal Processor architecture. The structure of the modified source code is then changed through multiple iterations using Finite State Morpoholology (FSM) and Dynamic Instruction Replacement (DIR) to generate the efficient source code.